



Prevention of Waterborne Disease

Producing Results

In 2003, corrective action taken by Alabama's Department of Public Health averted outbreaks of waterborne disease by eliminating contaminants in well water that threatened health. Now 96 percent of the state's water systems meet the federal drinking-water standards.

Public Health Problem

Of the private well-water samples routinely tested by the Alabama Department of Public Health, approximately 40 to 50 percent were contaminated with fecal coliforms, nitrates, and pesticides. Percentages for contamination were even higher for privately dug shallow wells that are less than 30 feet in depth and for water sources in rural and coastal areas. Failing septic tanks placed about 340,000 low-income persons in rural Alabama who use well water at risk for waterborne disease. During 2003-2004, Alabama received national media coverage when three low-income families were forced to live in tents in rural Lowndes County because a shared septic system failed. Significant costs are associated with the investigation and management of outbreaks of waterborne disease and with the medical treatment and lost productivity for those who become ill.

Taking Action

The Alabama Department of Environmental Management regulates and funds the protection of large municipal and community wells for drinking water and of persons who drill the wells, but it does not have funds to protect private wells that provide drinking water. Approximately \$109,000 of the state's PHHS Block Grant was used to develop a statewide monitoring system that enables the state to identify problems and take corrective action for both community wells and private wells. During 2003, program professionals undertook a number of steps, including: investigating and evaluating more than 150 failed septic tanks in sensitive areas statewide; working with each owner to repair every septic tank in accordance with the standards for sewage discharge; and conducting continuing education programs with the Alabama Onsite Wastewater Association, training more than 500 septic tank installers, pumpers, manufacturers, engineers, and surveyors in the proper installation of on-site sewage systems.

Implications and Impact

Alabama established a goal of no more than two outbreaks of waterborne disease per year. PHHS Block Grant funds enabled the state to investigate private wells and to review in real time the pathology findings for all samples of well water (both private and community) that were analyzed in the state clinical laboratories. This approach facilitated timely investigation and corrective action. The results included: no outbreaks of waterborne disease in 2003; and realizing a cost savings of \$280,000 per year for chemicals to treat the 780 community water systems. Above all, the citizens of Alabama were given the assurance that their health is a priority that is being protected.

Contact Information

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